

Gel Extraction

Requirements:

- Omega E.Z.N.A.® Gel Extraction Kit
- DNA agarose gel sliced from the electrophoresed gel
- 100% ethanol
- Microcentrifuge capable of at least 13,000 x g
- Nuclease-free 1.5 mL microcentrifuge tubes
- Sterile deionized water
- Electric dry oven of 55°C and 65°C
- Water bath of 65°C

Before starting:

- Heat sterile deionized water to 65°C using water bath
- Add 100mL 100% ethanol to the bottle of SPW Wash Buffer if there's no mark on the bottle, store at room temperature

Protocol:

1. Put the gel slice in a clean 1.5mL microcentrifuge tube.
2. Add Binding Buffer to fill the microcentrifuge tube from Step 1.
3. Incubate at 55°C in a water bath, until the gel has completely melted. Shake the tube every 2-3 minutes.
4. Insert a HiBind® DNA Mini Column in a 2mL Collection Tube.
5. Add 700µL solution from Step 3 to the HiBind® DNA Mini Column.
6. Centrifuge at 10,000 × g for 1 minute at room temperature.
7. Discard the filtrate and reuse collection tube.
8. Repeat Steps 5-7 until all of the sample has been transferred to the column.
9. Add 300µL Binding Buffer.
10. Centrifuge at maximum speed ($\geq 13,000 \times g$) for 1 minute at room temperature.
11. Discard the filtrate and reuse collection tube.
12. Add 700µL SPW Wash Buffer.
13. Centrifuge at maximum speed for 1 minute at room temperature.
14. Discard the filtrate and reuse collection tube.
15. Centrifuge the empty HiBind® DNA Mini Column for 2 minutes at maximum speed to dry the column matrix.
16. Transfer the HiBind® DNA Mini Column to a clean 1.5mL microcentrifuge tube. Open the lid and put it in the electric dry oven for 10 minutes to volatilize alcohol.
17. Add 35µL sterile deionized water directly to the center of the column membrane.
18. Let sit at room temperature for 2 minutes.
19. Centrifuge at maximum speed for 1 minute.
20. Store DNA at -20°C.